

furnish data on which to adjust the run-boundaries in that country. Mr. Carkeek's topographical maps of this work are particularly good. The coming season will see an extension of the Marlborough triangulation over the Seaward Kaikouras, and thus finish the principal work of this nature in that district; whilst in Taranaki the north-west part of the district will be taken in hand as soon as possible.

SETTLEMENT SURVEYS.

The output of section-work exceeded somewhat that of last year; it naturally varies from year to year a good deal. The average size of section laid out was 304 acres, and the cost 1s. 01 per acre, which is less than usual on account of the increased average size of the sections surveyed. The estates acquired under the Land for Settlements Acts formed a part of the year's work, and as these are situated in open easy-country they tend to lower the average cost of survey per acre; and, moreover, some areas of considerable size in Canterbury, cut up into a few divisions, also tend in the same direction. The lands dealt with during the year have generally been in small blocks, widely separated, and mostly in forest country, so that the small cost of 1s. 01 per acre is creditable to the surveyors employed. The reports of the Chief Surveyors furnish information as to the principal localities where this class of survey has been in progress.

Included in the Southland returns is an area of 9,245 acres surveyed at Stewart Island for landless Natives of the South Island, and further surveys for the same purpose have been in progress during the year in the country west of the Waiau River.

The operations for the ensuing season will partake of much the same character as that just elapsed. Blocks will be prepared for settlement wherever the access is sufficiently good to render the lands attractive. The surveys of land recently acquired in the so-called "King-country" will be put in hand, with a view of opening up some very fair country for settlement; and a considerable area in southern Hawke's Bay will be completed, ready for settlement. The surveys of further portions of the bush country of inland Taranaki will be ready during the year. In Wellington several blocks of land are in hand, and should be sufficiently advanced to allow of offering them to the public during the year. In Nelson and Marlborough several scattered blocks will come in for survey; and in the latter district the Scarborough Estate, acquired under the Land for Settlements Acts, will also be subdivided. In Canterbury, Otago, and Southland several scattered blocks will be prepared for settlement, amongst them any lands acquired under the Land for Settlements Acts.

NATIVE LAND COURT SURVEYS.

The area prepared for the Court was 266,824 acres, in 175 divisions, which represents, however, only the area surveyed by the staff surveyors, or by authorised private surveyors where the cost has been advanced by Government, and the bulk of the area so surveyed consists of subdivisions of blocks which had previously passed the Court.

MINING SURVEYS.

A very large decrease has taken place in the number of mining surveys during the year. The figures for 1897 were 2,706 sections, containing 206,829 acres; whilst those for 1898 are 571 sections, with an area of 31,751 acres. The decrease is due to the lesser amount of claims applied for in the Thames Goldfield. The cost of these surveys is deposited by the miners, in the first instance.

ROAD SURVEYS.

A somewhat greater mileage of roads has been surveyed (716 miles as against 569 for 1897). This class of survey comprises roads taken in exercise of the road-rights under Crown grants, and other roads not included in the settlement operations. It includes some surveys of railway-lines, made in order to secure the title thereto, and also other roads laid out with full engineering data, prior to construction. In addition to the above items, surveys of 105½ miles of water-races have been made in Canterbury.

MISCELLANEOUS WORK.

Under this head is included all the miscellaneous work performed by the surveyors which cannot be tabulated under other headings, such as inspection of surveys, standard surveys of towns, assistance rendered by the Survey staff in the inspection of improvements, inspection of road-works, and innumerable small items connected with the working of the department, the total cost being £12,307.

STANDARD CHAIN.

During the additions made to the Government Buildings, Wellington, the standard chain for the colony was destroyed. It therefore became necessary to lay down another, which has been done. The position is on the south side of the buildings, where a solid concrete foundation exists, and which furnishes a convenient and permanent base. The standard brass bar, by Elliott, of London, 48 in. in length, was used by very carefully marking off from it a length of 6 ft. on a Baltic pine bar. From this a similar length on a measuring bar, also of Baltic pine, was marked off; this bar having two steel points, one of them adjustable. This latter was used as the measuring apparatus, the terminals of each 6 ft. being marked on slate let into the concrete. The mean result of three measurements made by three sets of observers was taken.

BOARD OF EXAMINERS FOR SURVEYORS.

During the year seven Board meetings were held. Forty-seven applications for certificates, and for permission to sit for examination, were disposed of. Two examinations have been held, and twenty-four different candidates have been examined. Six of these, however, took part in both examinations, having only been partially successful in the first. The following are the names